and less conspicuously margined, and the sides are more rough with small reclinate tubercles. This species agrees with the description of E. parvicollis given by Mannerheim, (Bull. Mosc. 1843, 271) except that the base of the thorax is not narrower than the apex. Eschscholtz does not in his decription mention that the sides of the thorax are scabrous, but adds that the base of the thorax is nearly as wide as the widest portion of the thorax, whereby the latter appears small. A specimen from the St. Petersburg museum sent me as a type is not allied at all to this species, but rather to E. cordata.

The smaller species of Eleodes of this division are exceedingly abundant, and seem subject to some variation. It will be impossible to attain any definite results in the nomenclature of them until an authentic series of named specimens can be obtained by careful comparison with the types of Eschscholtz and Mannerheim.

E. viator, ovata, thorace latitudine sesqui breviore, lateribus valde rotundatis, postice breviter coarctato, ad basin apice haud latiore, confertim grosse punctato, elytris rotundato-ovalibus, antice truncatis, granulis nitidis inordinatis confertim positis, versus suturam punctatis, versus latera breviter hispidis, antennis extrorsum paulo incrassatis, femoribus muticis. Long. ·43—·50.

Fort Bridger, Dr. Hammond; Black Hills, Dr. F. V. Hayden. Closely allied to E. tuberculata, but with the granules of the elytra large, and extending almost to the suture, where they pass into punctures as in that species.

This is the first of the group that has occurred east of maritime California and Oregon.

The following species is unknown to me; as the work in which it is described is rarely seen, I have translated the original French description, and add it for the benefit of American naturalists.

'E. subaspera, ovalis, elongata, prothorace subquadrato, postice parum angustato, supra punctato bifoveolatoque; elytris punctatis lateribus et postice asperatis; femoribus anticis inermibus, tibiis anticis leviter incurvis. Long. ·67.'

Solier, Studi Entomologici, 246.

'This species is related to E. angusta, but is quite distinct. Head tolerably strongly punctured, especially anteriorly, where the punctures are very close. Suture of the epistoma well marked for its whole length, and forming a smooth space. Prothorax subrectangular, very slightly narrowed behind and hardly curved on the sides; punctuation of the back tolerably strong and close, but not variolate as in E. coriacea. Besides the punctures two foveæ tolerably well marked may be seen at the anterior third, about the middle of the breadth. Elytra covered with tolerably large scattered punctures, not placed in well marked striæ, somewhat rough, especially towards the sides and apex: no transverse rugæ. Abdomen finely punctured, with longitudinal rugæ, on the first three segments. Anterior tibiæ curved.

California, collection of Mr. Dupont.'

Nov. 2d.

Vice-President LEA in the Chair.

Thirty-eight members present.

Dr. Woodhouse announced the death, at Philadelphia, on the 28th ult., of Dr. Gavin Watson, late a member of the Academy.

Dr. Leidy remarked, that while spending a few weeks during the past summer, in company with Dr. Bridges, at the residence of our fellow member Mr. S. Powel, at Newport, Rhode Island, they together had examined the neighbor-

ing fresh-water streams and ponds for Polyzoa. They had the good fortune to find a species of *Cristatella;* being the first discovery of this genus in America. The locality of the polyzoon is Lily Pond, near Newport, in which it is found very abundantly, adhering to the under side of stones forming the shores of the pond.

In the month of August, the Cristatella masses were flattened, elliptical, about half an inch in length and about two lines wide, and were translucent yellowish white. About three rows of polyps encircled the masses. Each polyp supported on its horse-shoe-like arms seventy-two tentacles, conjoined at base by a delicate, festooned, areolated membrane.

Specimens of the Cristatella, placed in a dish of water, moved at the rate of an inch in about twenty-four hours.

The ova, or statoblasts, were only partially developed during my stay at Newport. The present month, Mr. Powel has sent to me fully developed specimens, accompanied with a note, in which he says, "I made an expedition to the Lily Pond, and procured great numbers of Cristatella with ova. I got upon one stone fifty-four separate masses, some of them one inch and three-quarters long and one quarter wide, of a beautiful amber color, full of ova, apparently in various stages of development."

These ova are the largest that I have seen in any genus of Polyzoa. They are double convex lenticular, and circular, with a marginal discoidal annulus, a little deeper on one side than on the other. From the inner margin of the annulus spring forth about seventy anchor-like appendages, of which fifty spring from one side, and bend in a doubly geniculate manner over the outer margin of the annulus; the remaining twenty are shorter, and diverge from the opposite side.

Breadth of statoblast, 1.152 mm., or about half a line independent of the anchors.

This American species of *Cristatella* is respectfully dedicated to the sister of Mr. Powel, with the name of CRISTATELLA IDÆ.

From the European *Cristatella mucedo*, the American species differs in habit as well as in several points of structure. Prof. Allman, in his valuable monograph on the Polyzoa, says, that "while the greater number of the fresh-water Polyzoa lurk on the under surface of stones and in dark recesses, *Cristatella* loves to expose itself to the full light and warmth of the sun."

The polyp of *C. mucedo* has about eighty tentacula; and the intestine is light bluish green. That of *C. Idæ* has about seventy-two tentacula, and the intestine is yellowish. The ova or statoblasts of *C. mucedo* are about one thirty-third of an inch broad; those of *C. Idæ* are about half a line. Prof. Allman's figure of the statoblast of the former species represents the anchors as sigmoid; those of the latter species have a double elbow.

The discovery of an American *Cristatella* has afforded me the opportunity of comparing its statoblasts with those of *Pectinatella*. The diagnosis formerly given by authors to those of *Cristatella*, equally well apply to those of *Pectinatella*, while the statoblasts of the two genera differ in a remarkable manner. This is sufficiently well indicated by comparing the following description with that above given, of the statoblasts of *Cristatella Idæ*. The statoblast of *Pectinatella magnifica* is doubly convex lenticular, quadrately circular, and slightly curved, with a marginal discoidal annulus, much deeper on one side than on the other. From the outer margin of the annulus spring forth about twelve to sixteen straightly diverging anchors. Breadth of statoblast 0.88 mm. by 0.8 mm., or about the third of a line.

Recently, Dr. Wm. Spillman, of Columbus, Mississippi, has sent to me a description, accompanied with drawings, of certain gelatinoid masses from the lakes of his vicinity, on which he desired some information. The masses, which Dr. Spillman observes hang from the immersed branches of plants and dead sticks, at the present time, (October,) "are from the size of a hen's egg to such as measure 15 inches long by 12 inches in diameter." The description, draw-

ing of the masses, and numerous specimens of statoblasts also received, are all referable to the *Pectinatella magnifica*. I had been prepared for this announcement by repeated information of medical students from the south-western portion of our country. Some of them have stated they had seen these jelly-like masses even as large as a half-bushel measure. Mr. Stimpson, the accurate naturalist, has informed me, that as early as 1850 he had detected large brain-like masses of Polyzoa attached to stones in the Middlesex canal, near Boston. As *Pectinatella*, so far as my observations go, has always been found attached to branches of trees, perhaps from the difference of habit, the brain-like masses may prove to be distinct.

Dr. Leidy further exhibited drawings of a species of *Fredericella*, which is found in the Delaware and Schuylkill rivers, near Philadelphia, and also in Lily Pond, near Newport. He has not yet positively ascertained whether the species is different from that found in Europe. He added, that two years since he had detected a species of *Lophopus* in the Schuylkill river, but he had not yet had leisure to determine its character.

Nov. 9th.

Twenty-seven members present.

A paper was presented for publication in the Proceedings entitled: Notes on American Land Shells, No. IV, by W. G. Binney, and was referred to a Committee.

Nov. 16th.

Vice-President BRIDGES in the Chair.

Thirty-five members present.

The following note, relating to the fossils presented this evening by Mr. David Christy, was read:

This fossil I have supposed to be the *Orthis bellarugosa*, CONRAD, which must have been figured from a young specimen. Hall's *O. insculpta* is an old worn specimen of it, sent by myself before we had discovered the locality for perfect specimens. It occurs at Oxford, Ohio, about 200 ft. below the Cliff Limestone, and has a vertical range of only a few feet. Its geographical range is extensive. The locality from which the best specimens come is 14 miles west of Oxford, where they occur in marlite, and the associated fossils I will give accurately hereafter.

Nov. 23d.

Vice-President BRIDGES in the Chair.

Thirty-five members present.

The following papers were presented for publication in the Journal:

Description of the Embryonic forms of thirty-eight species of Unionidæ, by Isaac Lea, LL.D.

New Unionidæ of the United States, by Isaac Lea, LL.D.

And one for publication in the Proceedings, entitled:

Catalogue of Birds collected by A. A. Henderson, M. D., U. S. N., at Hakodadi, Island of Jesso, Japan, with notes, by John Cassin.

And were referred to Committees.